[CLAIMS]

[Claim 1]

A phosphor,

wherein a first phosphor having a chemical formula of Sr_{4} . ${}_{x}Mg_{y}Ba_{z}Si_{2}O_{8}:Eu_{x}^{2+}$ (0 < x < 1, 0 \leq y \leq 1, 0 \leq z \leq 1) and a second phosphor having a chemical formula of $Sr_{3-x}SiO_{5}:Eu^{2+}{}_{x}$ (0 < x \leq 1) are used with mixed in a fixed ratio.

[Claim 2]

The phosphor of claim 1, wherein the first phosphor is excited by light having a main peak in a range of 400 to 480nm and has a light emitting main peak in a range of 500 to 600nm.

[Claim 3]

The phosphor of claim 1, wherein the second phosphor is excited by light having a main peak in a range of 400 to 480nm and has a light emitting main peak in a range of 550 to 600nm.

[Claim 4]

The phosphor of claim 1, wherein a ratio of the first phosphor and the second phosphor is in a range of 9.9:0.1 to 5.0:5.0.

[Claim 5]

The phosphor of claim 1, wherein an average size of a particle of the first phosphor and the second phosphor is $20\mu\text{m}$ or less.

[Claim 6]

The phosphor of claim 1, wherein an average size of a particle of the first phosphor and the second phosphor is in a range of 5 to $15\mu\text{m}$.

[Claim 7]

The phosphor of claim 1, wherein excitation light of the phosphor has a main peak in in a range of 400 to 480nm.

[Claim 8]

The phosphor of claim 1, wherein light exciting the phosphor and light excited by the phosphor are composed and emit white light.

[Claim 9]

- A light emitting device comprising:
- a light source;
- a substrate supporting the light source;
- a light transmitting member provided in at least one part around the light source; and
- a phosphor which is mixed in the light transmitting member and in which a first phosphor having a chemical formula of Sr_4 . ${}_xMg_yBa_zSi_2O_8:Eu_x^{2+}}$ (0 < x < 1, 0 \le y \le 1, 0 \le z \le 1) and a second phosphor having a chemical formula of $Sr_{3-x}SiO_5:Eu^{2+}_x$ (0 < x \le 1) are mixed in a fixed ratio.

[Claim 10]

The light emitting device of claim 9, wherein when the light emitting device is used in a top view type, a ratio of the first phosphor and the second phosphor is in a range of 9.7:

[Claim 11]

The light emitting device of claim 10, wherein a content of the phosphor to the light transmitting member is in a range of 10 to 30 wt%.

[Claim 12]

The light emitting device of claim 9, wherein when the light emitting device is used in a side view type, a ratio of the first phosphor and the second phosphor is in a range of 9.5 : 0.5 to 8.0 : 2.0.

[Claim 13]

The light emitting device of claim 12, wherein a content of the phosphor to the light transmitting member is in a range of 5 to 20wt%.

[Claim 14]

The light emitting device of claim 9, wherein when the light emitting device is used in white backlight, a mixed ratio of the first phosphor and the second phosphor is in a range of 9.7: 0.3 to 8.5: 1.5.

[Claim 15]

The light emitting device of claim 14, wherein a content of the phosphor to the light transmitting member is in a range of 20 to 50 wt%.

[Claim 16]

The light emitting device of claim 9, wherein when the light emitting device is used in bluish white color backlight, the first phosphor and the second phosphor are mixed in a ratio of 9.7: 0.3 to 8.5: 1.5.

[Claim 17]

The light emitting device of claim 16, wherein a content of the phosphor to the light transmitting member is in a range of 10 to 40 wt%.

[Claim 18]

The light emitting device of claim 9, wherein the light transmitting member is molded as a light transmitting resin material.

[Claim 19]

The light emitting device of claim 18, wherein the light transmitting resin member is a silicone resin or an epoxy resin.

[Claim 20]

The light emitting device of claim 9, wherein white color light is emitted after passing through the phosphor layer.

[Claim 21]

The light emitting device of claim 9, wherein the light transmitting member is entirely provided at the outside of the light source.

[Claim 22]

The light emitting device of claim 9, wherein the light transmitting member is partially provided at the outside of the light source.

[Claim 23]

- A light emitting device comprising:
- a light source emitting excitation light;
- a light transmitting member provided in at least one part around the light source; and

a phosphor which is received in the light transmitting member and in which a first phosphor having a light emitting main peak in a range of 500 to 600nm to a blue color light source and a second phosphor having a light emitting main peak in a range of 550 to 600nm to the blue color light source are mixed in a ratio of 9.9: 0.1 to 5.0: 5.0.

[Claim 24]

The light emitting device of claim 23, wherein light emitted from the light source and light excited from the phosphor are together emitted.

[Claim 25]

- A surface mounting-type light emitting device comprising:
- a light source;
- a support supporting the light source;
- a light transmitting member provided in at least one part around the light source; and
- a phosphor which is mixed in the light transmitting member and in which a first phosphor having a chemical formula of $Sr_{4-x}Mg_yBa_zSi_2O_8:Eu_x^{2+}$ (0 < x < 1, 0 \le y \le 1, 0 \le z \le 1) and a second phosphor having a chemical formula of $Sr_{3-x}SiO_5:Eu^{2+}_x$ (0 < x \le 1) are mixed in a fixed ratio.

[Claim 26]

- A lamp-type light emitting device comprising:
- a light source;
- a support supporting the light source;
- a light transmitting member provided in at least one part around the light source; and
- a phosphor which is mixed in the light transmitting member and in which a first phosphor having a chemical formula of Sr_{4} . $_{x}Mg_{y}Ba_{z}Si_{2}O_{8}:Eu_{x}^{2+}$ (0 < x < 1, 0 \leq y \leq 1, 0 \leq z \leq 1) and a second phosphor having a chemical formula of $Sr_{3-x}SiO_{5}:Eu^{2+}_{x}$ (0 < x \leq 1) are mixed in a fixed ratio.